

Abstract

5 The invention relates to a software system and method for automatically verifying
the correct execution of an application ported from one instruction set architecture (ISA)
to another ISA. In this method, versions of the application are prepared for the two ISAs.
Each version is then executed in a simulator or emulator for the appropriate ISA and the
results of any change in memory made during the execution are compared. If each
memory change made during the execution of the target version of the application is
10 found to be equivalent to a memory change made during the execution of the source
version of the application, the execution of the target (or ported) application is verifiably
correct.